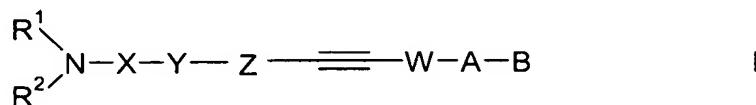


What is claimed is:

1. Alkyne compounds of general formula I



wherein

R^1, R^2 independently of one another denote H, a C₁₋₈-alkyl or C₃₋₇-cycloalkyl group optionally substituted by the group R¹¹, while a -CH₂- group in position 3 or 4 of a 5-, 6- or 7-membered cycloalkyl group may be replaced by -O-, -S- or -NR¹³-, or a phenyl or pyridinyl group optionally mono- or polysubstituted by the group R¹² and/or monosubstituted by nitro, or

R^1 and R^2 form a C₂₋₈-alkylene bridge wherein

- one or two -CH₂- groups independently of one another may be replaced by -CH=N- or -CH=CH- and/or
- one or two -CH₂- groups may be replaced independently of one another by -O-, -S-, -SO-, -(SO₂)-, -C=N-R¹⁸-, -C=N-O-R¹⁸-, -CO-, -C(=CH₂)- or -NR¹³- in such a way that heteroatoms are not directly connected to one another,

while in the above-defined alkylene bridge one or more H atoms may be replaced by R¹⁴, and

while the above-defined alkylene bridge may be substituted by one or two identical or different carbo- or heterocyclic groups Cy in such a way that the bond between the alkylene bridge and the group Cy is formed

- via a single or double bond,
- via a common C atom forming a spirocyclic ring system,
- via two common, adjacent C and/or N atoms forming a fused bicyclic ring system or
- via three or more C and/or N atoms forming a bridged ring system,

X

denotes a single bond or a C₁₋₆-alkylene bridge wherein

- a -CH₂- group may be replaced by -CH=CH- or -C≡C- and/or
- one or two -CH₂- groups may be replaced independently of one another by -O-, -S-, -(SO)-, -(SO₂)-, -CO- or -NR⁴- in such a way that in each case two O, S or N atoms or an O and an S atom are not directly connected to one another,

while the bridge X may be attached to R¹ including the N atom attached to R¹ and X forming a heterocyclic group, while the bridge X may additionally also be attached to R², including the N-atom attached to R² and X, forming a heterocyclic group, and

two C atoms or one C and one N atom of the alkylene bridge may be joined together by an additional C₁₋₄-alkylene bridge, and

a C atom may be substituted by R¹⁰ and/or one or two C atoms in each case may be substituted with one or two identical or different substituents selected from C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₄₋₇-cycloalkenyl and C₄₋₇-cycloalkenyl-C₁₋₃-alkyl, while two alkyl and/or alkenyl substituents may be joined together, forming a carbocyclic ring system,

and

W, Z independently of one another denote a single bond or a C₁₋₄-alkylene bridge,

while in the group W and/or Z a -CH₂- group not adjacent to the -C≡C group may be replaced by -O or -NR⁵-, and

two adjacent C atoms or one C atom and an adjacent N atom may be joined together by an additional C₁₋₄-alkylene bridge, and

in the alkylene bridge and/or in the additional alkylene bridge a C atom may be substituted by R¹⁰ and/or one or two C atoms independently of one another may be substituted by one or two identical or different C₁₋₆-alkyl groups, while two alkyl groups may be joined together, forming a carbocyclic ring, and

Y denotes one of the meanings given for Cy,

while R¹ may be attached to Y including the group X and the N atom attached to R¹ and X , forming a heterocyclic group fused to Y, and/or

X may be attached to Y forming a carbo- or heterocyclic group fused to Y, and

A denotes one of the meanings given for Cy and

B denotes one of the meanings given for Cy or

C₁₋₆-alkyl, C₁₋₆-alkenyl, C₁₋₆-alkynyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₃₋₇-cycloalkenyl-C₁₋₃-alkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkenyl or C₃₋₇-cycloalkyl-C₁₋₃-alkynyl, wherein one or more C atoms may be mono- or polysubstituted by halogen and/ or may be monosubstituted by hydroxy

or cyano and/ or cyclic groups may be mono- or polysubstituted by R²⁰,

Cy denotes a carbo- or heterocyclic group selected from one of the following meanings

- a saturated 3- to 7-membered carbocyclic group,
- an unsaturated 4- to 7-membered carbocyclic group,
- a phenyl group,
- a saturated 4- to 7-membered or unsaturated 5- to 7-membered heterocyclic group with an N, O or S atom as heteroatom,
- a saturated or unsaturated 5- to 7-membered heterocyclic group with two or more N atoms or with one or two N atoms and an O or S atom as heteroatoms,
- an aromatic heterocyclic 5- or 6-membered group with one or more identical or different heteroatoms selected from N, O and/or S,

while the above-mentioned 4-, 5-, 6- or 7-membered groups may be attached via two common, adjacent C atoms fused to a phenyl or pyridine ring, and

in the above-mentioned 5-, 6- or 7-membered groups one or two non-adjacent -CH₂- groups may be replaced independently of one another by a -CO-, -C(=CH₂)-, -(SO)- or -(SO₂)- group, and

the above-mentioned saturated 6- or 7-membered groups may also be present as bridged ring systems with an imino, (C₁₋₄-alkyl)-imino, methylene, (C₁₋₄-alkyl)-methylene or di-(C₁₋₄-alkyl)-methylene bridge, and

the above-mentioned cyclic groups may be mono- or polysubstituted at one or more C atoms with R²⁰, in the case of a phenyl group they may also additionally be monosubstituted with nitro, and/or one or more NH

groups may be substituted with R²¹,

R⁴, R⁵ independently of one another have one of the meanings given for R¹⁷,

R¹⁰ denotes hydroxy, ω -hydroxy-C₁₋₃-alkyl, C₁₋₄-alkoxy, ω -(C₁₋₄-alkoxy)-C₁₋₃-alkyl, carboxy, C₁₋₄-alkoxycarbonyl, amino, C₁₋₄-alkyl-amino, di-(C₁₋₄-alkyl)-amino, cyclo-C₃₋₆-alkyleneimino, amino-C₁₋₃-alkyl, C₁₋₄-alkyl-amino-C₁₋₃-alkyl, di-(C₁₋₄-alkyl)-amino-C₁₋₃-alkyl, cyclo-C₃₋₆-alkyleneimino-C₁₋₃-alkyl, amino-C₂₋₃-alkoxy, C₁₋₄-alkyl-amino-C₂₋₃-alkoxy, di-(C₁₋₄-alkyl)-amino-C₂₋₃-alkoxy, cyclo-C₃₋₆-alkyleneimino-C₂₋₃-alkoxy, aminocarbonyl, C₁₋₄-alkyl-aminocarbonyl, di-(C₁₋₄-alkyl)-aminocarbonyl, cyclo-C₃₋₆-alkyleneimino-carbonyl,

R¹¹ denotes C₂₋₆-alkenyl, C₂₋₆-alkynyl, R¹⁵-O, R¹⁵-O-CO, R¹⁵-CO-O, R¹⁶R¹⁷N, R¹⁸R¹⁹N-CO or Cy,

R¹² has one of the meanings given for R²⁰,

R¹³ has one of the meanings given for R¹⁷, with the exception of carboxy,

R¹⁴ denotes halogen, C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, R¹⁵-O, R¹⁵-O-CO, R¹⁵-CO-O, R¹⁶R¹⁷N, R¹⁸R¹⁹N-CO, R¹⁵-O-C₁₋₃-alkyl, R¹⁵-O-CO-C₁₋₃-alkyl, R¹⁵-O-CO-NH, R¹⁵-SO₂-NH, R¹⁵-O-CO-NH-C₁₋₃-alkyl, R¹⁵-SO₂-NH-C₁₋₃-alkyl, R¹⁵-CO-C₁₋₃-alkyl, R¹⁵-CO-O-C₁₋₃-alkyl, R¹⁶R¹⁷N-C₁₋₃-alkyl, R¹⁸R¹⁹N-CO-C₁₋₃-alkyl or Cy-C₁₋₃-alkyl,

R¹⁵ denotes H, C₁₋₄-alkyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, phenyl, phenyl-C₁₋₃-alkyl, pyridinyl or pyridinyl-C₁₋₃-alkyl,

R¹⁶ denotes H, C₁₋₆-alkyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₄₋₇-cycloalkenyl, C₄₋₇-cycloalkenyl-C₁₋₃-alkyl, ω -hydroxy-C₂₋₃-alkyl, ω -(C₁₋

4-alkoxy)-C₂-3-alkyl, amino-C₂-6-alkyl, C₁-4-alkyl-amino-C₂-6-alkyl, di-(C₁-4-alkyl)-amino-C₂-6-alkyl or cyclo-C₃-6-alkyleneimino-C₂-6-alkyl,

R¹⁷ has one of the meanings given for R¹⁶ or denotes phenyl, phenyl-C₁-3-alkyl, pyridinyl, dioxolan-2-yl, -CHO, C₁-4-alkylcarbonyl, carboxy,

hydroxycarbonyl-C₁-3-alkyl, C₁-4-alkoxycarbonyl,

C₁-4-alkoxycarbonyl-C₁-3-alkyl, C₁-4-alkylcarbonylamino-C₂-3-alkyl,

N-(C₁-4-alkylcarbonyl)-N-(C₁-4-alkyl)-amino-C₂-3-alkyl,

C₁-4-alkylsulphonyl, C₁-4-alkylsulphonylamino-C₂-3-alkyl or

N-(C₁-4-alkylsulphonyl)-N-(C₁-4-alkyl)-amino-C₂-3-alkyl

R¹⁸, R¹⁹ independently of one another denote H or C₁-6-alkyl,

R²⁰ denotes halogen, hydroxy, cyano, C₁-6-alkyl, C₂-6-alkenyl, C₂-6-alkynyl, C₃-7-cycloalkyl, C₃-7-cycloalkyl-C₁-3-alkyl, hydroxy-C₁-3-alkyl, R²²-C₁-3-alkyl or has one of the meanings given for R²²,

R²¹ denotes C₁-4-alkyl, ω-hydroxy-C₂-6-alkyl, ω-C₁-4-alkoxy-C₂-6-alkyl, ω-C₁-4-alkyl-amino-C₂-6-alkyl, ω-di-(C₁-4-alkyl)-amino-C₂-6-alkyl, ω-cyclo-C₃-6-alkyleneimino-C₂-6-alkyl, phenyl, phenyl-C₁-3-alkyl, C₁-4-alkyl-carbonyl, C₁-4-alkoxy-carbonyl, C₁-4-alkylsulphonyl, phenylcarbonyl or phenyl-C₁-3-alkyl-carbonyl,

R²² denotes pyridinyl, phenyl, phenyl-C₁-3-alkoxy, OHC, HO-N=HC, C₁-4-alkoxy-N=HC, C₁-4-alkoxy, C₁-4-alkylthio, carboxy, C₁-4-alkylcarbonyl, C₁-4-alkoxycarbonyl, aminocarbonyl, C₁-4-alkylamino-carbonyl, di-(C₁-4-alkyl)-aminocarbonyl, cyclo-C₃-6-alkyl-amino-carbonyl, cyclo-C₃-6-alkyleneimino-carbonyl, cyclo-C₃-6-alkyleneimino-C₂-4-alkyl-aminocarbonyl, C₁-4-alkyl-sulphonyl, C₁-4-alkyl-sulphanyl, C₁-4-alkyl-sulphonylamino, amino, C₁-4-alkylamino, di-(C₁-4-alkyl)-amino, C₁-4-alkyl-carbonyl-amino, cyclo-C₃-6-alkyleneimino, phenyl-C₁-3-alkylamino,

N-(C₁₋₄-alkyl)-phenyl-C₁₋₃-alkylamino, acetylamino, propionylamino, phenylcarbonyl, phenylcarbonylamino, phenylcarbonylmethylamino, hydroxy-C₂₋₃-alkylaminocarbonyl, (4-morpholinyl)carbonyl, (1-pyrrolidinyl)carbonyl, (1-piperidinyl)carbonyl, (hexahydro-1-azepinyl)carbonyl, (4-methyl-1-piperazinyl)carbonyl, methylenedioxy, aminocarbonylamino or alkylaminocarbonylamino,

while in the above-mentioned groups and residues, particularly in A, B, W, X, Y, Z, R¹ to R⁵ and R¹⁰ to R²², in each case one or more C atoms may additionally be mono- or polysubstituted by F and/or in each case one or two C atoms independently of one another may additionally be monosubstituted by Cl or Br and/or in each case one or more phenyl rings independently of one another additionally have one, two or three substituents selected from among F, Cl, Br, I, cyano, C₁₋₄-alkyl, C₁₋₄-alkoxy, difluoromethyl, trifluoromethyl, hydroxy, amino, C₁₋₃-alkylamino, di-(C₁₋₃-alkyl)-amino, acetylamino, aminocarbonyl, difluoromethoxy, trifluoromethoxy, amino-C₁₋₃-alkyl, C₁₋₃-alkylamino-C₁₋₃-alkyl- and di-(C₁₋₃-alkyl)-amino-C₁₋₃-alkyl- and/or may be monosubstituted by nitro, and

the H atom of any carboxy group present or an H atom bound to an N atom may each be replaced by a group which can be cleaved in vivo,

the tautomers, the diastereomers, the enantiomers, the mixtures thereof and the salts thereof.

2. Alkyne compounds according to claim 1, characterised in that

R¹, R² independently of one another denote H, a C₁₋₈-alkyl or C₃₋₇-cycloalkyl group optionally substituted by the group R¹¹ or a phenyl group optionally mono- or polysubstituted by the group R¹² and/or monosubstituted by nitro, or

R¹ and R² form a C₂₋₈-alkylene bridge, wherein

- one or two -CH₂- groups independently of one another may be replaced by -CH=N- or -CH=CH- and/or
- one or two -CH₂- groups independently of one another may be replaced by -O-, -S-, -CO-, -C(=CH₂)- or -NR¹³- in such a way that heteroatoms are not directly joined together,

while in the alkylene bridge defined hereinbefore one or more H atoms may be replaced by R¹⁴, and

the alkylene bridge defined hereinbefore may be substituted by one or two identical or different carbo- or heterocyclic groups Cy in such a way that the bond between the alkylene bridge and the group Cy is made

- via a single or double bond,
- via a common C atom forming a spirocyclic ring system,
- via two common adjacent C- and/or N atoms forming a fused bicyclic ring system or
- via three or more C- and/or N atoms forming a bridged ring system,

X

denotes a single bond or a C₁₋₆-alkylene bridge, wherein

- a -CH₂- group may be replaced by -CH=CH- or -C≡C- and/or
- one or two -CH₂- groups independently of one another may be replaced by -O-, -S-, -(SO)-, -(SO₂)-, -CO- or -NR⁴- in such a way that in each case two O, S or N atoms or an O and an S atom are not directly joined together,

while the bridge X may be attached to R¹ including the N atom attached to R¹ and X, forming a heterocyclic group, and

while two C atoms or a C and an N atom of the alkylene bridge may be joined together by an additional C₁₋₄-alkylene bridge, and

a C atom may be substituted by R¹⁰ and/or one or two C atoms in each case may be substituted by one or two identical or different C₁₋₆-alkyl groups, and

W, Z independently of one another denote a single bond or a C₁₋₄-alkylene bridge,

while in the group W and/or Z a -CH₂- group not adjacent to the -C≡C- group may be replaced by -O- or -NR⁵, and

two adjacent C atoms or a C atom and an adjacent N atom may be joined together by an additional C₁₋₄-alkylene bridge, and

in the alkylene bridge and/or in the additional alkylene bridge a C atom may be substituted by R¹⁰ and/or one or two C atoms independently of one another may be substituted by one or two identical or different C₁₋₆-alkyl groups, and

B has one of the meanings given for Cy or

denotes C₁₋₆-alkyl, C₁₋₆-alkenyl, C₁₋₆-alkynyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₃₋₇-cycloalkenyl-C₁₋₃-alkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkenyl or C₃₋₇-cycloalkyl-C₁₋₃-alkynyl, wherein one or more C atoms may be mono- or polysubstituted by fluorine and cyclic groups may be mono- or polysubstituted by R²⁰,

R^{10}	denotes hydroxy, ω -hydroxy-C ₁₋₃ -alkyl, C ₁₋₄ -alkoxy, ω -(C ₁₋₄ -alkoxy)-C ₁₋₃ -alkyl, amino, C ₁₋₄ -alkyl-amino, di-(C ₁₋₄ -alkyl)-amino, cyclo-C ₃₋₆ -alkyleneimino, amino-C ₁₋₃ -alkyl, C ₁₋₄ -alkyl-amino-C ₁₋₃ -alkyl, di-(C ₁₋₄ -alkyl)-amino-C ₁₋₃ -alkyl, cyclo-C ₃₋₆ -alkyleneimino-C ₁₋₃ -alkyl, amino-C ₂₋₃ -alkoxy, C ₁₋₄ -alkyl-amino-C ₂₋₃ -alkoxy, di-(C ₁₋₄ -alkyl)-amino-C ₂₋₃ -alkoxy or cyclo-C ₃₋₆ -alkyleneimino-C ₂₋₃ -alkoxy,
R^{13}	has one of the meanings given for R^{17} ,
R^{14}	denotes halogen, C ₁₋₆ -alkyl, R ¹⁵ -O, R ¹⁵ -O-CO, R ¹⁵ -CO, R ¹⁵ -CO-O, R ¹⁶ R ¹⁷ N, R ¹⁸ R ¹⁹ N-CO, R ¹⁵ -O-C ₁₋₃ -alkyl, R ¹⁵ -O-CO-C ₁₋₃ -alkyl, R ¹⁵ -CO-C ₁₋₃ -alkyl, R ¹⁵ -CO-O-C ₁₋₃ -alkyl, R ¹⁶ R ¹⁷ N-C ₁₋₃ -alkyl, R ¹⁸ R ¹⁹ N-CO-C ₁₋₃ -alkyl or Cy-C ₁₋₃ -alkyl,
R^{15}	denotes H, C ₁₋₄ -alkyl, C ₃₋₇ -cycloalkyl, C ₃₋₇ -cycloalkyl-C ₁₋₃ -alkyl, phenyl or phenyl-C ₁₋₃ -alkyl,
R^{17}	has one of the meanings given for R^{16} or denotes phenyl, phenyl-C ₁₋₃ -alkyl, C ₁₋₄ -alkylcarbonyl, hydroxycarbonyl-C ₁₋₃ -alkyl, C ₁₋₄ -alkylcarbonylamino-C ₂₋₃ -alkyl, N-(C ₁₋₄ -alkylcarbonyl)-N-(C ₁₋₄ -alkyl)-amino-C ₂₋₃ -alkyl, C ₁₋₄ -alkylsulphonyl, C ₁₋₄ -alkylsulphonylamino-C ₂₋₃ -alkyl or N-(C ₁₋₄ -alkylsulphonyl)-N-(C ₁₋₄ -alkyl)-amino-C ₂₋₃ -alkyl
R^{20}	denotes halogen, hydroxy, cyano, C ₁₋₆ -alkyl, C ₃₋₇ -cycloalkyl, C ₃₋₇ -cycloalkyl-C ₁₋₃ -alkyl, hydroxy-C ₁₋₃ -alkyl, R ²² -C ₁₋₃ -alkyl or has one of the meanings given for R^{22} ,
R^{22}	denotes phenyl, phenyl-C ₁₋₃ -alkoxy, C ₁₋₄ -alkoxy, C ₁₋₄ -alkylthio, carbonyl, C ₁₋₄ -alkylcarbonyl, C ₁₋₄ -alkoxycarbonyl, aminocarbonyl, C ₁₋₄ -alkylaminocarbonyl, di-(C ₁₋₄ -alkyl)-aminocarbonyl, cyclo-C ₃₋₆ -

alkyleneimino-carbonyl, C₁₋₄-alkyl-sulphonyl, C₁₋₄-alkyl-sulphanyl, C₁₋₄-alkyl-sulphonylamino, amino, C₁₋₄-alkylamino, di-(C₁₋₄-alkyl)-amino, cyclo-C₃₋₆-alkyleneimino, phenyl-C₁₋₃-alkylamino, N-(C₁₋₄-alkyl)-phenyl-C₁₋₃-alkylamino, acetylamino, propionylamino, phenylcarbonyl, phenylcarbonylamino, phenylcarbonylmethylamino, hydroxyalkylaminocarbonyl, (4-morpholinyl)carbonyl, (1-pyrrolidinyl)-carbonyl, (1-piperidinyl)carbonyl, (hexahydro-1-azepinyl)carbonyl, (4-methyl-1-piperazinyl)carbonyl, methylenedioxy, aminocarbonylamino or alkylaminocarbonylamino.

3. Alkyne compounds according to claim 1, characterised in that R¹, R² independently of one another represent H, C₁₋₆-alkyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, ω-hydroxy-C₂₋₃-alkyl, ω-(C₁₋₄-alkoxy)-C₂₋₃-alkyl, C₁₋₄-alkoxy-carbonyl-C₁₋₄-alkyl, carboxyl-C₁₋₄-alkyl, amino-C₂₋₄-alkyl, C₁₋₄-alkyl-amino-C₂₋₄-alkyl, di-(C₁₋₄-alkyl)-amino-C₂₋₄-alkyl, cyclo-C₃₋₆-alkyleneimino-C₂₋₄-alkyl, pyrrolidin-3-yl, N-(C₁₋₄-alkyl)-pyrrolidinyl, pyrrolidinyl-C₁₋₃-alkyl, N-(C₁₋₄-alkyl)-pyrrolidinyl-C₁₋₃-alkyl, piperidinyl, N-(C₁₋₄-alkyl)-piperidinyl, piperidinyl-C₁₋₃-alkyl, N-(C₁₋₄-alkyl)-piperidinyl-C₁₋₃-alkyl, phenyl, phenyl-C₁₋₃-alkyl, pyridyl or pyridyl-C₁₋₃-alkyl,

while in the above-mentioned groups and residues one or more C atoms may be mono- or polysubstituted by F and/or one or two C atoms may be monosubstituted independently of one another by Cl or Br, and

the phenyl or pyridyl group may be mono- or polysubstituted by the group R¹² defined in claim 1 and/or may be monosubstituted by nitro.

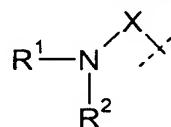
4. Alkyne compounds according to one or more of claims 1 to 3, characterised in that R¹ and R² form an alkylene bridge according to claim 1 in such a way that R¹R²N- denotes a group selected from azetidine, pyrrolidine, piperidine, azepan, 2,5-dihydro-1H-pyrrole, 1,2,3,6-tetrahydro-

pyridine, 2,3,4,7-tetrahydro-1H-azepine, 2,3,6,7-tetrahydro-1H-azepine, piperazine, wherein the free imine function may be substituted by R¹³, piperidin-4-one-oxime, piperidin-4-one-O-C₁₋₄-alkyl-oxime, morpholine and thiomorpholine,

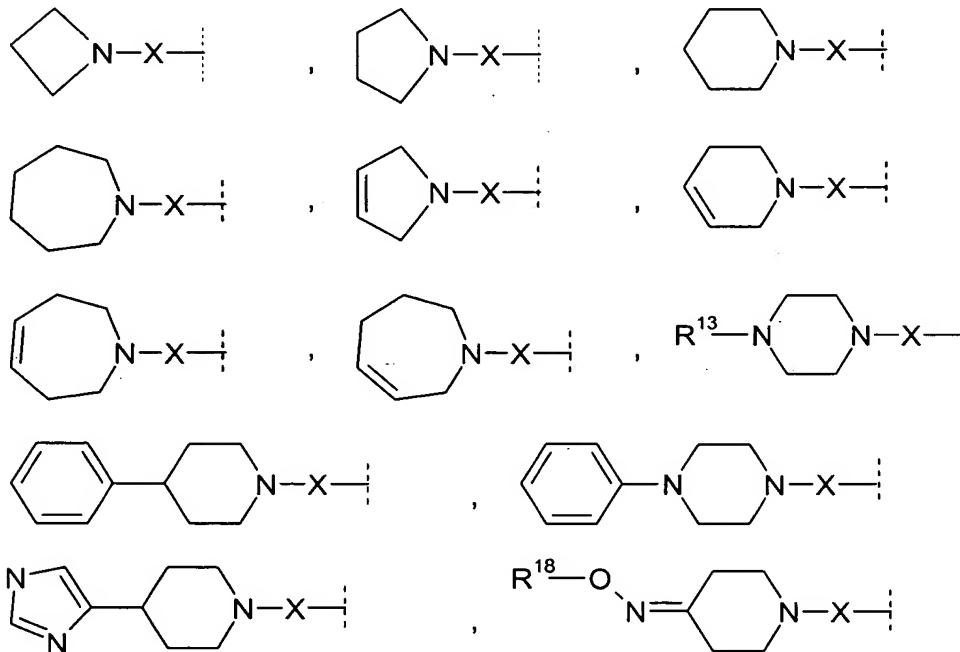
while according to claim 1 one or more H atoms may be replaced by R¹⁴, and/or the alkylene bridge may be substituted by one or two identical or different carbo- or heterocyclic groups Cy in a manner specified in claim 1.

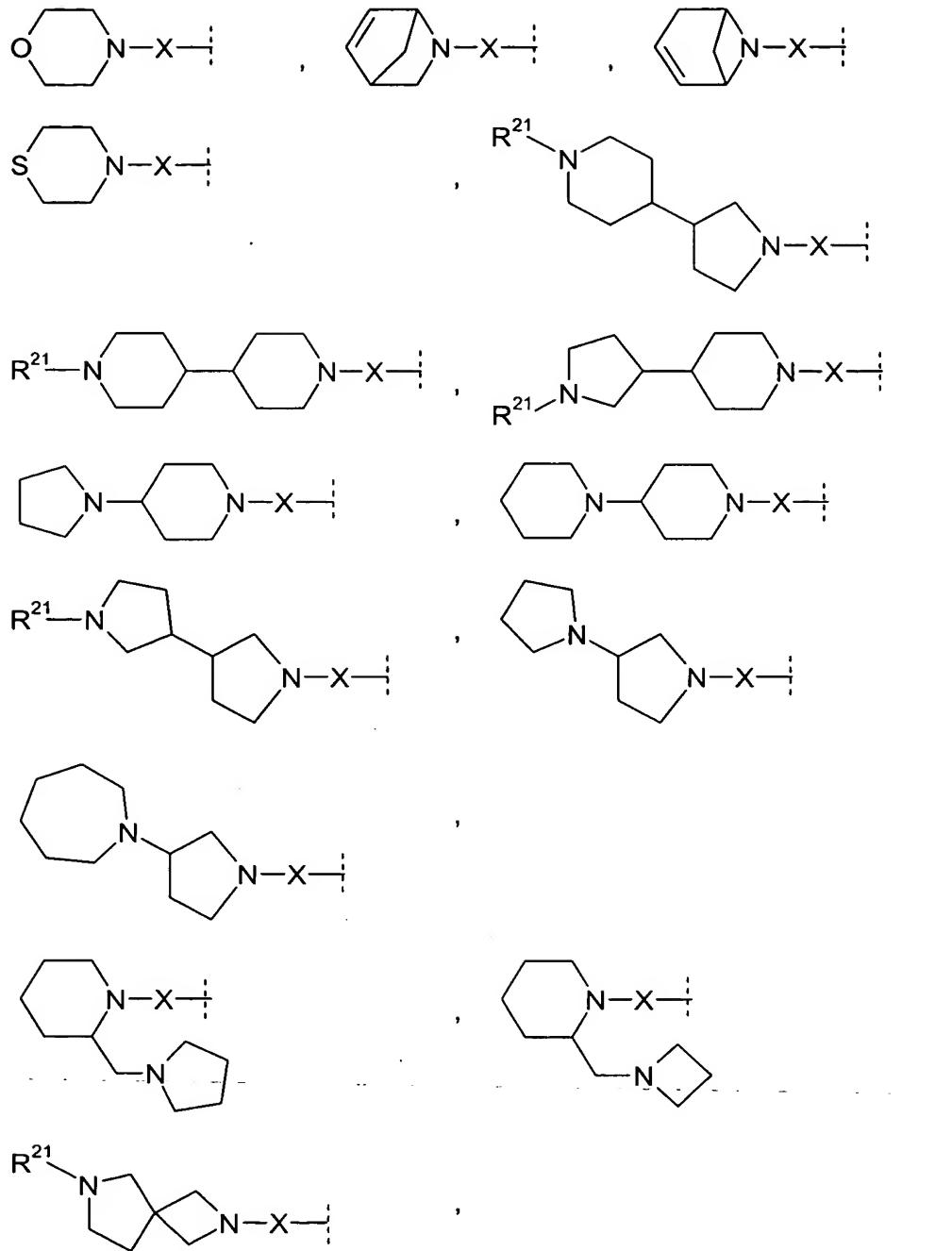
5. Alkyne compounds according to claim 1, characterised in that

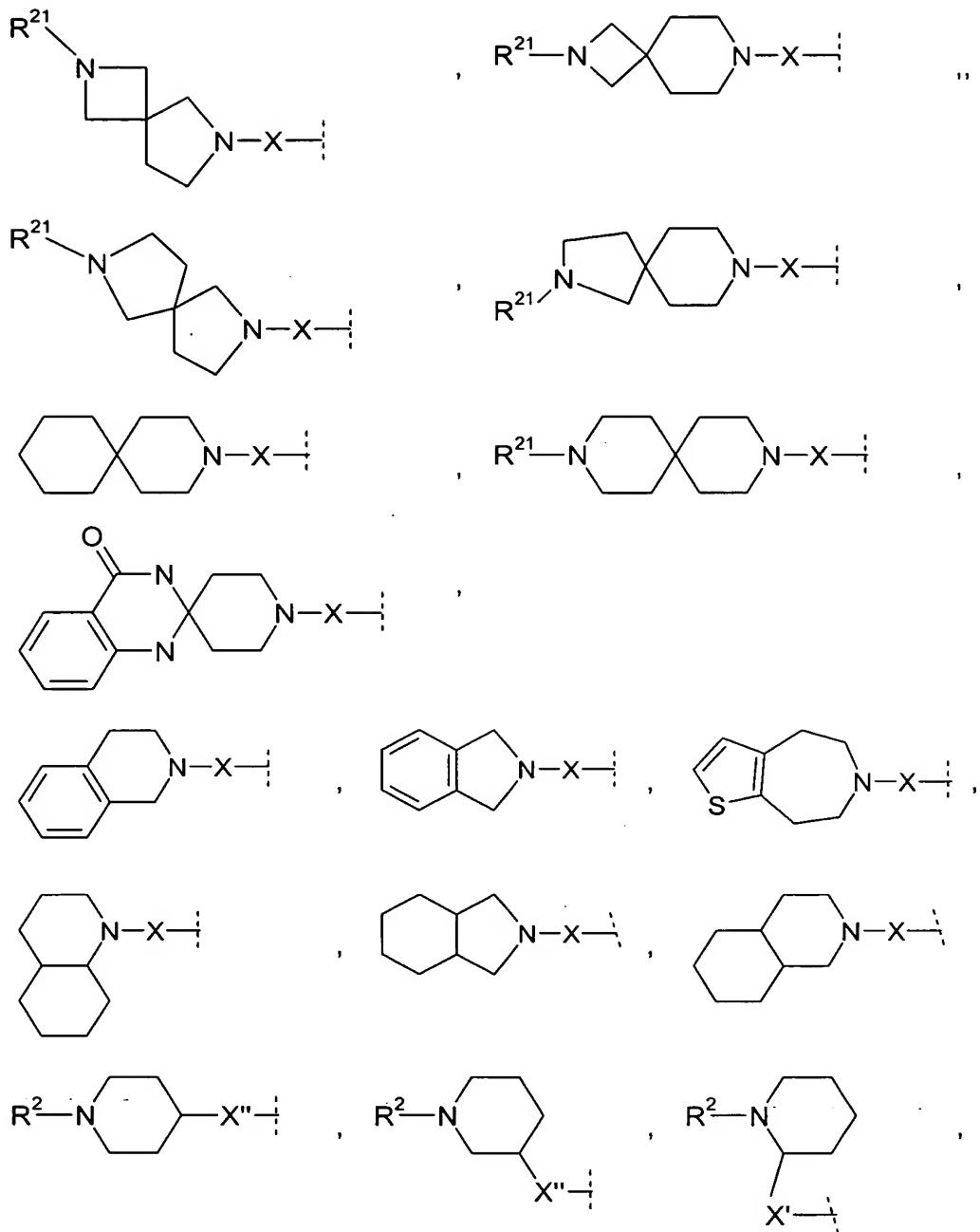
the group

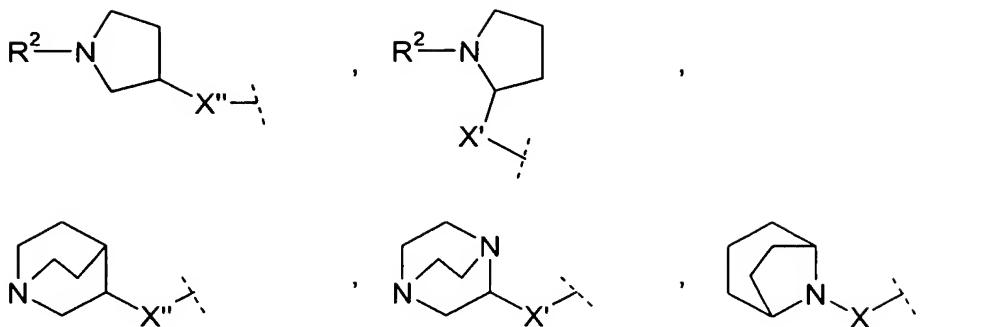


is defined according to one of the following partial formulae









wherein one or more H atoms of the heterocycle formed by the group R¹R²N- may be replaced by R¹⁴ and the ring attached to the heterocycle formed by the group R¹R²N- may be mono- or polysubstituted by R²⁰ at one or more C atoms, in the case of a phenyl ring may also additionally be monosubstituted by nitro and

X', X'' independently of one another denote a single bond or C₁₋₃-alkylene and

in the event that the group Y is linked to X' or X'' via a C atom, also denote -C₁₋₃-alkylene-O-, -C₁₋₃-alkylene-NH- or -C₁₋₃-alkylene-N(C₁₋₃-alkyl)-, and

X'' additionally also denotes -O-C₁₋₃-alkylene-, -NH-C₁₋₃-alkylene- or -N(C₁₋₃-alkyl)-C₁₋₃-alkylene- and

in the event that the group Y is linked to X'' via a C atom, also denotes -NH-, -N(C₁₋₃-alkyl)- or -O-,

while in the meanings given for X', X'' hereinbefore, in each case a C atom may be substituted by R¹⁰, preferably by a hydroxy, ω-hydroxy-C₁₋₃-alkyl, ω-(C₁₋₄-alkoxy)-C₁₋₃-alkyl and/or C₁₋₄-alkoxy group, and/or one or two C atoms in each case may be substituted by one or two identical or different substituents selected from C₁₋₆-alkyl, C₂₋₆-

alkenyl, C₂₋₆-alkynyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₄₋₇-cycloalkenyl and C₄₋₇-cycloalkenyl-C₁₋₃-alkyl, while two alkyl and/or alkenyl substituents may be joined together, forming a carbocyclic ring system, and

in X', X" independently of one another in each case one or more C atoms may be mono- or polysubstituted by F and/or in each case one or two C atoms independently of one another may be monosubstituted by Cl or Br.

6. Alkyne compounds according to claim 1, characterised in that X denotes a single bond or C₁₋₄-alkylene and

in the event that the group Y is linked to X via a C atom, it also denotes -CH₂-CH=CH-, -CH₂-C≡C-, C₂₋₄-alkylenoxy, C₂₋₄-alkylene-NR⁴, C₂₋₄-alkylene-NR⁴-C₂₋₄-alkylene-O, 1,2- or 1,3-pyrrolidinylene or 1,2-, 1,3- or 1,4-piperidinylene, while the pyrrolidinylene and piperidinylene groups are bound to Y via the imino group,

while the bridge X may be attached to R¹ including the N atom attached to R¹ and X, forming a heterocyclic group, and the bridge X may additionally also be attached to R², including the N atom attached to R² and X, forming a heterocyclic group, and

in X a C atom may be substituted by R¹⁰, and/or one or two C atoms in each case may be substituted by one or two identical or different substituents selected from C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₄₋₇-cycloalkenyl and C₄₋₇-cycloalkenyl-C₁₋₃-alkyl, while two alkyl and/or alkenyl substituents may be joined together, forming a carbocyclic ring system, and

in the above-mentioned groups and residues one or more C atoms may be mono- or polysubstituted by F and/or one or two C atoms independently of one another may be monosubstituted by Cl or Br.

7. Alkyne compounds according to claim 6, characterised in that X denotes -CH₂- , -CH₂-CH₂- or -CH₂-CH₂-CH₂- and

in the event that the group Y is bonded to X via a C atom, it also denotes -CH₂-C≡C- -CH₂-CH₂-O-, -CH₂-CH₂-NR⁴- or 1,3-pyrrolidinylene, while the pyrrolidinylene group is linked to Y via the imino group, and

the bridge X may be attached to R¹ including the N atom attached to R¹ and X, forming a heterocyclic group, and the bridge X may additionally also be attached to R², including the N atom attached to R² and X, forming a heterocyclic group, and

in X a C atom may be substituted by R¹⁰, preferably a hydroxy, ω-hydroxy-C₁₋₃-alkyl, ω-(C₁₋₄-alkoxy)-C₁₋₃-alkyl and/or C₁₋₄-alkoxy group, and/or one or two C atoms in each case may be substituted by one or two identical or different substituents selected from C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₄₋₇-cycloalkenyl and C₄₋₇-cycloalkenyl-C₁₋₃-alkyl, while two alkyl and/or alkenyl substituents may be joined together, forming a carbocyclic ring system, and

in each case one or more C atoms may be mono- or polysubstituted by F and/or in each case one or two C atoms independently of one another may be monosubstituted by Cl or Br.

8. Alkyne compounds according to claim 1, characterised in that W and/or Z independently of one another may denote a single bond, -CH₂- , -CH₂-CH₂- , -CH₂-CH₂-CH₂- or cyclopropylene and

W may additionally also represent -CH₂-O-, -CH₂-CH₂-O-, -CH₂-NR⁴- or -CH₂-CH₂-NR⁴- and

Z may additionally also represent -O-CH₂-, -O-CH₂-CH₂-, -NR⁴-CH₂- or -NR⁴-CH₂-CH₂-,

wherein a C atom may be substituted by R¹⁰, preferably by a hydroxy, ω-hydroxy-C₁₋₃-alkyl, ω-(C₁₋₄-alkoxy)-C₁₋₃-alkyl- and/or C₁₋₄-alkoxy group, and/or one or two C atoms independently of one another may each be substituted by one or two identical or different C₁₋₄-alkyl groups, and

in each case one or more C atoms may be mono- or polysubstituted by F and/or in each case one or two C atoms may be monosubstituted independently of one another by Cl or Br.

9. Alkyne compounds according to claim 8, characterised in that W and/or Z independently of one another denote a single bond or are selected from among the bridges -CH₂-, -CH₂-CH₂-, -CH₂-CH(CH₃)-, -CH₂-C(CH₃)₂-, -CH(CH₃)-CH₂-, -C(CH₃)₂-CH₂-, cyclopropylene, -CH₂-CH(R¹⁰)-, -CH(R¹⁰)-CH₂- and

W may additionally also represent -CH₂-O- or -CH₂-NR⁴- and

Z may additionally also represent -O-CH₂- or -NR⁴-CH₂-,

wherein R⁴ has the meanings given in claim 1, preferably -H, methyl, ethyl or propyl, and

wherein R¹⁰ has the meanings given in claim 1, preferably -OH,

N-pyrrolidinyl, amino-ethoxy, C₁₋₄-alkyl-amino-ethoxy, di-(C₁₋₄-alkyl)-amino-ethoxy, and

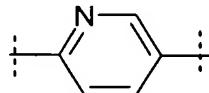
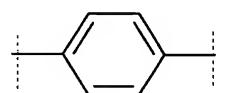
in each case one or more C atoms may be mono- or polysubstituted by F and/or in each case one or two C atoms may be monosubstituted independently of one another by Cl or Br.

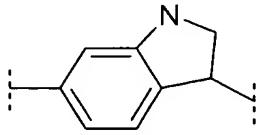
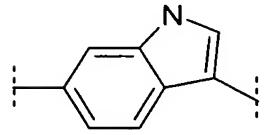
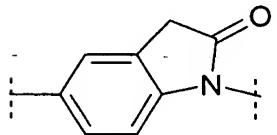
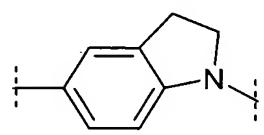
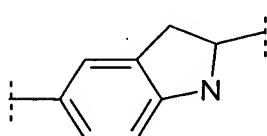
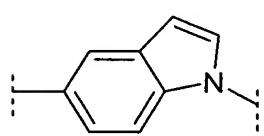
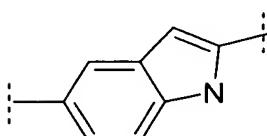
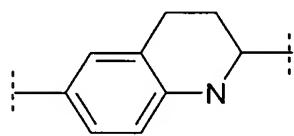
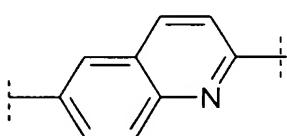
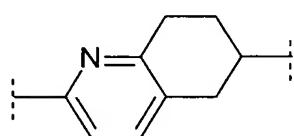
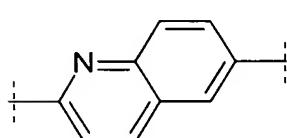
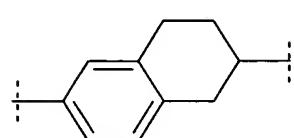
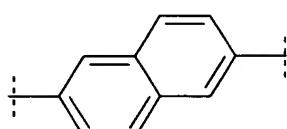
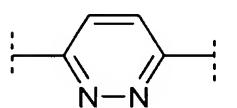
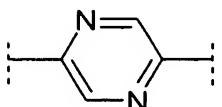
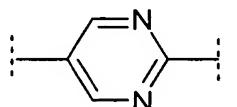
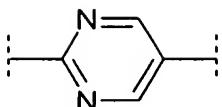
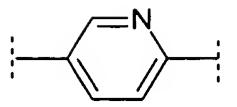
10. Alkyne compounds according to claim 1, characterised in that the group Y is selected from among the bivalent cyclic groups phenyl, naphthyl, thiienyl, benzothienyl, tetrahydronaphthyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, indolyl, dihydroindolyl, dihydroindolonyl, quinolinyl, tetrahydroquinolinyl, isoquinolinyl, tetrahydro-isoquinolinyl, indazolyl, benzimidazolyl, benzofuranyl or benzoxazolyl,

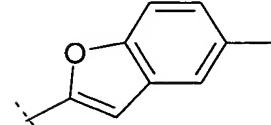
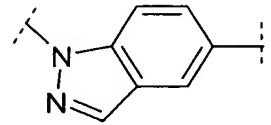
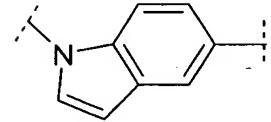
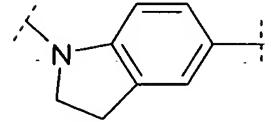
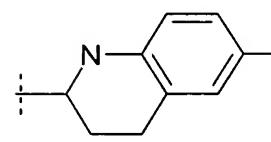
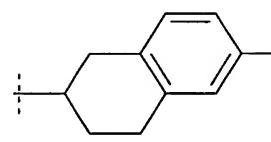
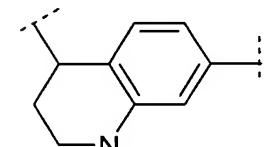
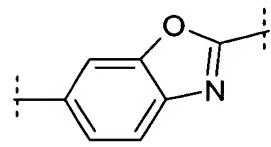
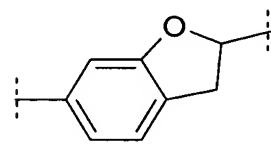
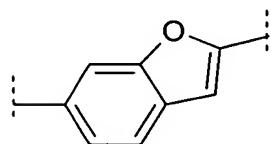
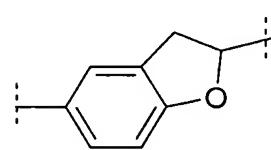
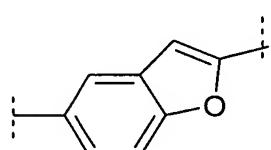
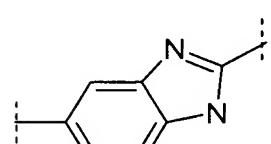
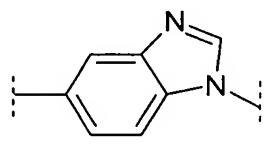
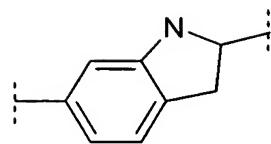
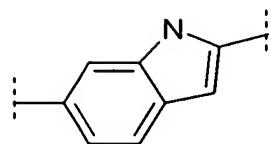
while the above-mentioned cyclic groups may be mono- or polysubstituted at one or more C atoms by R²⁰, and in the case of a phenyl group may also additionally be monosubstituted by nitro, and/or may be substituted by R²¹ at one or more N atoms,

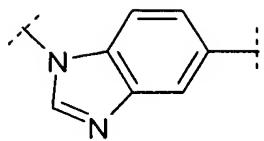
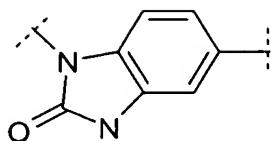
while R¹ may be attached to Y and/or X may be attached to Y as specified in claim 1.

11. Alkyne compounds according to claim 1, characterised in that the group Y is selected from among the bivalent cyclic groups









while the above-mentioned cyclic groups may be mono- or polysubstituted by R²⁰ at one or more C atoms, and in the case of a phenyl group may also additionally be monosubstituted by nitro, and/or one or more NH groups may be substituted by R²¹.

12. Alkyne compounds according to claim 1, characterised in that the group A is selected from among the bivalent cyclic groups phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl,

while the above-mentioned cyclic groups may be mono- or polysubstituted at one or more C atoms by R²⁰, and in the case of a phenyl ring may also additionally be monosubstituted by nitro, and/or one or more NH groups may be substituted by R²¹.

13. Alkyne compounds according to claim 1, characterised in that the group B is selected from the first group comprising phenyl, thienyl and furanyl or

from the second group comprising C₁₋₆-alkyl, C₁₋₆-alkenyl, C₁₋₆-alkynyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₃₋₇-cycloalkenyl-C₁₋₃-alkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkenyl, C₃₋₇-cycloalkyl-C₁₋₃-alkynyl, wherein one or more C atoms may be mono- or polysubstituted by fluorine, and

the above-mentioned cyclic groups may be mono- or polysubstituted by R²⁰ at one or more C atoms, and in the case of a phenyl group may also additionally be monosubstituted by nitro.

14. Alkyne compounds according to claim 1, characterised in that

R^{20} denotes F, Cl, Br, I, OH, cyano, methyl, difluoromethyl, trifluoromethyl, ethyl, n-propyl, iso-propyl, methoxy, difluoromethoxy, trifluoromethoxy, ethoxy, n-propoxy or iso-propoxy, while any substituents R^{20} occurring repeatedly may have identical or different meanings.

15. Alkyne compounds according to claim 1 selected from the formulae

- (1) 5-(4-chloro-phenyl)-2-[5-(2-pyrrolidin-1-yl-ethoxy)-pyridin-2-yl-ethynyl]-pyridine
- (2) [(R)-1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-pyrrolidin-2-yl]-methanol
- (3) 5-(4-chloro-phenyl)-2-[2-(4-methyl-piperidin-1-ylmethyl)-benzofuran-5-ylethynyl]-pyridine
- (4) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-(2-pyrrolidin-1-yl-ethyl)-1,3-dihydro-benzimidazol-2-one
- (5) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-piperidin-4-yl]-methanol
- (6) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-3-ol
- (7) N-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenyl}-2-pyrrolidin-1-yl-propionamide
- (8) 1-{3-[5-(4-chloro-phenyl)-pyridin-2-yl]-prop-2-ynyl}-5-pyrrolidin-1-ylmethyl-1H-indole
- (9) 2-[4-(4-azetidin-1-ylmethyl-phenyl)-but-1-ynyl]-5-(4-chloro-phenyl)-pyridine

- (10) 5-(4-chloro-phenyl)-2-[4-(4-piperidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (11) 5-(4-bromo-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (12) 2-[(4-{5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-methyl-amino]-ethanol
- (13) 5-(4-chloro-phenyl)-2-{4-[4-((S)-2-methoxymethyl-pyrrolidin-1-ylmethyl)-phenyl]-but-1-ynyl}-pyridine
- (14) 5-(4-chloro-phenyl)-2-{4-[2-(4-propyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (15) 5'-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-3-pyrrolidin-1-yl-3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl
- (16) 5-(4-chloro-phenyl)-2-{4-[4-(2-methyl-pyrrolidin-1-ylmethyl)-phenyl]-but-1-ynyl}-pyridine
- (17) 3-(4-chloro-phenyl)-6-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridazine
- (18) 5-(4-chloro-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (19) 5-(4-chloro-phenyl)-2-{4-[2-(2,6-dimethyl-piperidin-1-yl)-ethoxy]-3-methyl-phenylethynyl}-pyridine
- (20) methyl 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-(2-pyrrolidin-1-yl-ethoxy)-benzoate
- (21) 5-(4-chloro-phenyl)-2-[3-methyl-4-(2-piperidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (22) 5-(4-chloro-phenyl)-2-[3-methyl-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (23) 5-(4-chloro-phenyl)-2-{4-[4-(4-methyl-piperidin-1-ylmethyl)-phenyl]-but-1-ynyl}-pyridine

- (24) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-ol
- (25) 5-(4-chloro-phenyl)-2-{3-methyl-4-[2-(2-pyrrolidin-1-ylmethyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (26) {5-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-pyridin-2-yl}-(2-piperidin-1-yl-ethyl)-amine
- (27) 4-(4-{5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-morpholine
- (28) (4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-methyl-piperidin-4-yl-amine
- (29) 5-(4-chloro-phenyl)-2-[3-(4-pyrrolidin-1-ylmethyl-phenoxy)-prop-1-ynyl]-pyridine
- (30) 6-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-2-pyrrolidin-1-ylmethyl-1,2,3,4-tetrahydro-quinoline
- (31) (1-{5-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-pyridin-2-yl}-pyrrolidin-3-yl)-dimethyl-amine
- (32) [(S)-1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-2-methyl-phenoxy}-ethyl)-pyrrolidin-2-yl]-methanol
- (33) 5-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-2-(2-pyrrolidin-1-yl-ethoxy)-phenylamine
- (34) {5-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-pyridin-2-yl}-(2-pyrrolidin-1-yl-propyl)-amine
- (35) 1-(4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-pyrrolidin-3-ylamine
- (36) 2-[3-bromo-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-5-(4-chloro-phenyl)-pyridine
- (37) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-2-methyl-phenoxy}-ethyl)-azepan
- (38) 5-(4-chloro-phenyl)-2-(6-pyrrolidin-1-ylmethyl-naphthalen-2-yethynyl)-pyridine

- (39) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-N-methyl-2-(2-pyrrolidin-1-yl-ethoxy)-benzamide
- (40) (2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-cyclopropylmethyl-propyl-amine
- (41) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-4-methyl-piperidin-4-ol
- (42) 5-(4-chloro-phenyl)-2-{3-methyl-4-[2-(4-methyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (43) 5-(4-chloro-phenyl)-3-fluoro-2-{4-[2-(4-methyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (44) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-(2-pyrrolidin-1-yl-ethyl)-1H-indole
- (45) {4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenyl}-(2-pyrrolidin-1-yl-ethyl)-amine
- (46) methyl [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-yl]-acetate
- (47) {5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-pyridin-2-yl}-methyl-(2-pyrrolidin-1-yl-ethyl)-amine
- (48) tert-butyl [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-pyrrolidin-3-yl]-carbaminate
- (49) 5-(4-chloro-phenyl)-2-[3-methoxy-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (50) 5-(4-chloro-phenyl)-2-[4-(2-piperidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (51) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-(2-pyrrolidin-1-yl-ethyl)-1H-indazole
- (52) 2-[4-(2-azetidin-1-yl-ethoxy)-phenylethynyl]-5-(4-chloro-phenyl)-pyridine
- (53) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-(2-pyrrolidin-1-yl-ethoxy)-benzaldehyde O-methyl-oxime

- (54) 1'-(5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-pyridin-2-yl)-[1,3']bipyrrolidinyl
- (55) (4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-methyl-(1-methyl-piperidin-4-yl)-amine
- (56) 5-(4-chloro-phenyl)-2-[3-chloro-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (57) (S)-1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-pyrrolidin-3-ol
- (58) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-yl]-pyridin-2-yl-amine
- (59) 5-(4-bromo-phenyl)-2-[4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (60) N-[1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-piperidin-4-ylmethyl]-N-methyl-acetamide
- (61) 5-(2,4-dichloro-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (62) 5-(4-chloro-phenyl)-2-{4-[2-(4-ethyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (63) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-yl]-methanol
- (64) 5-(4-chloro-phenyl)-2-[4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (65) 5-(4-chloro-phenyl)-2-{4-[2-(3,6-dihydro-2H-pyridine-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (66) 5-(4-chloro-phenyl)-2-{4-[2-(2-methyl-pyrrolidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (67) (4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-cyclopropylmethyl-amine
- (68) 5-(4-chloro-phenyl)-2-{4-[4-(4-pyrrolidin-1-yl-piperidin-1-ylmethyl)-phenyl]-but-1-ynyl}-pyridine

(69) 5-(4-methoxy-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine

(70) 5-(3,4-difluoro-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine

(71) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-4-methyl-piperidin-4-ol

(72) 5-(4-chloro-phenyl)-2-{4-[4-((R)-2-methoxymethyl-pyrrolidin-1-ylmethyl)-phenyl]-but-1-ynyl}-pyridine

(73) 6-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-pyrrolidin-1-ylmethyl-quinoline

(74) 1-(4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-4-methyl-piperazine

(75) {5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-pyridin-2-yl}-(2-pyrrolidin-1-yl-ethyl)-amine

(76) 5-(4-chloro-phenyl)-2-(3-methyl-4-{2-[4-(pyridin-2-yloxy)-piperidin-1-yl]-ethoxy}-phenylethynyl)-pyridine

(77) 5-(4-chloro-phenyl)-2-{4-[2-(3,6-dihydro-2H-pyridine-1-yl)-ethoxy]-3-methyl-phenylethynyl}-pyridine

(78) (R)-1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-pyrrolidin-3-ol

(79) 1-(2-{5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-indol-1-yl}-ethyl)-piperidin-4-ol

(80) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-piperidin-4-ol

(81) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-4-phenyl-piperidin-4-ol

(82) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-[4,4']bipiperidinyl

(83) 5-(4-chloro-phenyl)-2-[3-ethynyl-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine

(84) 5-(3,4-dichloro-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine

(85) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-2-methyl-phenoxy}-ethyl)-4-methyl-piperidin-4-ylamine

(86) 5-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-2-(2-pyrrolidin-1-yl-ethoxy)-benzaldehyde-oxime

(87) 5-(4-chloro-phenyl)-2-{4-[2-(2,6-dimethyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine

(88) 5-(4-chloro-phenyl)-2-(4-{2-[4-(1H-imidazol-4-yl)-piperidin-1-yl]-ethoxy}-3-methyl-phenylethynyl)-pyridine

(89) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-2-yl]-methanol

(90) (4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-methyl-pyridin-2-ylmethyl-amine

(91) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-phenoxy}-ethyl)-piperidin-4-carboxylic acid amide

(92) 2-[(2-{4-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-phenoxy}-ethyl)-methyl-amino]-ethanol

(93) 5-(4-chloro-phenyl)-2-{4-[2-(4-methyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine

(94) {2-[1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-yl]-ethyl}-diethyl-amine

(95) 5-(4-chloro-phenyl)-2-{4-[2-(2,4,6-trimethyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine

(96) 5-(4-chloro-phenyl)-2-{4-[2-(3,5-dimethyl-piperidin-1-yl)-ethoxy]-3-methyl-phenylethynyl}-pyridine

(97) cis-2-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-phenoxy}-ethyl)-decahydro-isoquinoline

(98) 6-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-yethynyl]-2-methyl-phenoxy}-ethyl)-2-methyl-2,6-diaza-spiro[3.4]octane

(99) 1-(2-{5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-indol-1-yl}-ethyl)-4-methyl-piperidin-4-ol

(100) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-pyrrolidin-3-yl]-dimethyl-amine

(101) 5-(4-chloro-phenyl)-2-[3-fluoro-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine

(102) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-yl]-cyclopentyl-methyl-amine

(103) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-(2-pyrrolidin-1-yl-ethyl)-2,3-dihydro-1H-indole

(104) 5-(4-chloro-phenyl)-2-{4-[2-(4-pyrrolidin-1-yl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine

(105) 5-(4-chloro-phenyl)-2-{4-[2-(2,5-dihydro-pyrrol-1-yl)-ethoxy]-phenylethynyl}-pyridine

(106) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-piperidin-4-ylmethyl]-dimethyl-amine

(107) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-4-methyl-piperazine

(108) (4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-pyridin-2-ylmethyl-amine

(109) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-spiro[piperidin-4,2'(1H')-quinazoline]-4'(3'H)one

(110) 4-{{(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-methyl-amino}-methyl}-phenol

(111) 5-(4-chloro-phenyl)-2-[4-(3-piperidin-1-yl-pyrrolidin-1-yl)-phenylethynyl]-pyridine

(112) 5-(4-chloro-phenyl)-2-[2-(2-pyrrolidin-1-yl-ethoxy)-pyridin-5-yl-ethynyl]-pyridine

(113) 3-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-9-methyl-3,9-diaza-spiro[5.5]undecane

- (114) (2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-diisopropyl-amine
- (115) 5-(4-chloro-phenyl)-2-[4-(3-pyrrolidin-1-yl-propyl)-phenylethynyl]-pyridine
- (116) 2-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-1,2,3,4-tetrahydro-isoquinoline
- (117) 3-(4-chloro-phenyl)-6-[4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridazine
- (118) (R)-1-(2-{5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-indol-1-yl}-ethyl)-pyrrolidin-3-ol
- (119) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-3-methyl-1-(2-pyrrolidin-1-yl-ethyl)-1,3-dihydro-benzimidazol-2-one
- (120) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-(2-pyrrolidin-1-yl-ethyl)-1H-benzimidazole
- (121) 2-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-methyl-5-pyrrolidin-1-ylmethyl-1H-benzimidazole
- (122) trans-2-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-decahydro-isoquinoline

including the tautomers, the diastereomers, the enantiomers, the mixtures thereof and the salts thereof.

- 16 Physiologically acceptable salts of the alkyne compounds according to claim 1.
- 17. Composition, comprising at least one alkyne compound according to claim 1, optionally together with one or more inert carriers and/or diluents.
- 18. Use of at least one alkyne compound according to claim 1 for influencing the eating behaviour of a mammal.

19. Use of at least one alkyne compound according to claim 1 for reducing the body weight and/ or for preventing an increase in the body weight of a mammal.
20. Use of at least one alkyne compound according to claim 1 for modulating MCH activity in a mammal by providing a MCH receptor antagonist.
21. Use of at least one alkyne compound according to claim 1 for the prevention and/or treatment of urinary problems, such as for example urinary incontinence, overactive bladder, urgency, nycturia and enuresis, in a mammal.